



## PREVENTION OF SIGNIFICANT DETERIORATION PERMIT

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| <b>Issued To:</b>                | BP Cherry Point Refinery                        |
| <b>Facility Location:</b>        | 4519 Grandview Road<br>Blaine, Washington 98230 |
| <b>Permit Number:</b>            | <b>PSD No. 7, Amendment 1</b>                   |
| <b>Date of Permit Issuance:</b>  |   |
| <b>Effective Date of Permit:</b> |   |

This approval is issued pursuant to the regulations for the Prevention of Significant Deterioration (PSD) set forth in the Washington Administrative Code 173-400-700. Based upon the application and fees submitted by the BP Cherry Point Refinery (BP) with the fees received on September 13, 2021, the technical analysis performed by the Department of Ecology (Ecology), Ecology now finds the following:

### PREPARED BY:

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Science and Engineering Section  
Air Quality Program

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Date

### APPROVED BY:

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Robert Dengel  
Deputy Air Quality Program Manager  
Washington Department of Ecology

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Date

## Project Description

BP owns and operates the BP Cherry Point Refinery, which is located in the city of Blaine in Whatcom County, Washington.

BP applied for an amendment of their PSD No. 7 permit to:

- Revise Condition 2 to remove the hourly average firing rate limit of 60 million British thermal units per hour (MMBtu/hr) for the Naphtha Hydrodesulfurization (NHDS) Heater. This heater was never constructed as part of the Clean Gasoline Project that installed a new gasoline reformer (#2 Reformer) unit at the refinery.
- Revise Condition 4 to change the 160 parts per million (ppm) hydrogen sulfide (H<sub>2</sub>S) three-hour rolling average limit to 162 ppm H<sub>2</sub>S three-hour rolling average limit.
- Revise Condition 4 to change the 90 ppm H<sub>2</sub>S monthly average limit to a more stringent 50 ppm H<sub>2</sub>S 24-hour average limit.
- Remove Condition 3 that requires continuous oxygen monitor on the #2 Reformer Heaters.
- Revise Condition 1 to clarify the existing oxides of nitrogen (NO<sub>x</sub>) and carbon monoxide (CO) mass-based emissions limits of pounds per hour (lb/hr) and tons per year (tpy).

This PSD No. 7, Amendment 1 revises the PSD No. 7 issued March 13, 1986, for the emission unit described below.

- 340 MMBtu/hr #2 Reformer Heaters

## Approval Conditions

1. Emissions from the #2 Reformer Heaters shall not exceed any of the following limitations:
  - a. 9.5 lb/hr CO, 60-minute rolling average
  - b. 41.7 tpy CO, 12-month rolling total
  - c. 27.2 lb/hr NO<sub>x</sub> (as NO<sub>2</sub>), 60-minute rolling average
  - d. 119.1 tpy of NO<sub>x</sub> (as NO<sub>2</sub>), 12-month rolling total
2. Firing of the #2 Reformer Heaters shall not exceed 340 MMBtu/hr, based on the hourly average calculated heat content of the fuel.
3. H<sub>2</sub>S in the fuel gas to the #2 Reformer Heater shall not exceed:
  - a. 162 ppm, 3-hour rolling average, and
  - b. 50 ppm, 24-hour rolling average.
4. A continuous H<sub>2</sub>S monitor shall be installed on the fuel feed line and operated according to Performance Specification 2 (40 CFR 60, Appendix B). H<sub>2</sub>S records shall be kept for a minimum of two years, and made available for inspection upon request.
5. Any activity, which is undertaken, by the company or other, in a manner, which is inconsistent with this determination, shall be subject to department enforcement under applicable regulations. Nothing in this determination shall be construed to relieve the company of its obligations under any state, local, or federal laws or regulations.
6. Access to the source by EPA, state, or local regulatory personnel shall be permitted upon request for the purpose of compliance assurance inspections. Failure to allow such access is ground for revocation of this permit.
7. This permit supersedes PSD No. 7.